

CLIMATOLOGICAL DATA FOR SEPTEMBER, 1911.

DISTRICT No. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

Unseasonably warm weather prevailed throughout the district during the entire month, except that there were a few cool days about the middle of the last decade over the western portion of the district. Precipitation was entirely in the form of rain, except that a trace of snow occurred at three stations near the headwaters of the Arkansas River in Colorado. Periods of precipitation were fairly well defined, but it is impossible to generalize them for the district as a whole.

TEMPERATURE.

Mean temperatures were above the normal throughout the district, the departures ranging from $+1.3^{\circ}$ to $+8.0^{\circ}$. The greatest excess in mean temperature occurred in the south central portion of the Kansas area and the least in the New Mexico area. The warmest weather occurred generally from the 12th to 14th, and maximum temperatures were above 100° in all portions of the district, except in the New Mexico area, where the highest temperature was 98° . The highest temperature recorded was 107° at Bonham, Tex., and at Hugoton, Kans. A maximum reading of 105° was recorded at Mangum, Okla., and at Union City, Tenn. The lowest temperatures occurred generally from the 18th to 22d, except that in the southern portion of the district, the minimum readings were recorded at many stations on the 1st, and from the 24th to 30th. Minimum temperatures were generally below 60° , except in the southern portion of the district, where they were between 60° and 70° , generally; in the mountainous portions of the Colorado and New Mexico areas they were below 40° . The lowest temperature recorded was 24° at Elizabethtown, N. Mex.

Monthly mean temperatures and departures from the normal for the various States and parts of States are reported as follows: Colorado area, 63.1° , $+2.8^{\circ}$; New Mexico area, 67.8° , $+3.1^{\circ}$; Texas area, 78.3° , $+5.8^{\circ}$; Kansas area, 75.8° , $+6.2^{\circ}$; Oklahoma, 79.7° , $+6.1^{\circ}$; Missouri area, 75.5° , $+5.7^{\circ}$; Tennessee area, 78.4° , $+6.2^{\circ}$; Arkansas, 79.0° , $+5.4^{\circ}$; Mississippi area, 81.0° , $+5.9^{\circ}$; Louisiana, 82.2° , $+4.8^{\circ}$.

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—Less than the normal precipitation occurred over this drainage area, except in Arkansas, eastern Kansas, and northeastern Oklahoma, where there was an excess at most stations. Over the headwaters of the Arkansas River in Colorado, the average precipitation from 35 stations was 0.99 inch, about half an inch below the normal. Over those portions of the Arkansas Valley proper that lie in Kansas and Oklahoma, the average from 38 stations was 2.72 inches,

about half the normal amount, but there was a deficiency in the western and an excess in the eastern portion. The average from 18 stations in the Cimarron Valley was 1.20 inches, about 0.9 inch below the normal. The precipitation was unevenly distributed over the Canadian Valley. Over the headwaters of this valley in New Mexico the amounts from 41 stations averaged 1.56 inches, about 0.3 inch below the normal. The precipitation was heavy in some localities in those portions of the Canadian Valley that lie in Texas and Oklahoma, but the average from 31 stations was 2.20 inches, about the normal amount. Generally heavy rains occurred in the Verdigris Valley, the average from 10 stations being 4.86 inches, about 1.7 inches above the normal. The average precipitation from 18 stations in the Neosho Valley was 4.85 inches, about 0.8 inch above the normal. Heavy precipitation occurred generally over that part of the Arkansas Valley below the Oklahoma Arkansas line, where the amounts from 15 stations averaged 5.24 inches, about 2.3 inches above the normal.

Red River and tributaries.—The precipitation was light throughout this drainage area, except in a few widely scattered localities. Over that portion of the Red River Valley that lies in New Mexico, Texas, and Oklahoma, the average from 43 stations was 2.02 inches, about 1.1 inches below the normal. Over those portions of this valley below the Texas Arkansas line the precipitation from 17 stations averaged 1.33 inches, about 1.7 inches below the normal.

Mississippi River south of St. Louis and small tributaries.—The precipitation was below the normal over this drainage area, except in northeast Arkansas and Missouri, where there was an excess. In the immediate Mississippi Valley the amounts from 39 stations averaged 3.15 inches, about the normal amount. Over the Valley of the Meramec the precipitation averaged about 1 inch above the normal. The average from 22 stations in the White River Valley was 4.71 inches, about 0.9 inch above the normal. The average from 29 stations in the Yazoo Valley was 0.99 inch, about 1.8 inches below the normal. The precipitation in the Valley of the Big Black averaged 1.14 inches, about 1.8 inches below the normal. The precipitation was unevenly distributed over the Ouachita Valley, the average from 20 stations being 1.52 inches, about 1.9 inches below the normal.

Louisiana coastal plain.—Heavy precipitation occurred in some parts of this area, but the amounts were small in several localities. The average from 33 stations was 4.32 inches, about 0.2 inch below the normal. There was more than 6 inches at 6 stations.

Monthly precipitation and departures from the normal for the various States and parts of States (in inches) are reported as follows: Colorado area, 0.96, -0.58 ; New Mexico area, 1.62, -0.61 ; Texas area, 1.54, -1.46 ; Kansas area, 3.44, $+0.88$; Oklahoma, 2.50, -0.27 ; Missouri,

4.46, +0.82; Tennessee area, 2.47, -0.33; Arkansas, 3.67, +0.65; Mississippi area, 1.32, -1.42; Louisiana, 3.14, -0.81.

RIVERS.

Changes were generally slight in the upper Arkansas and low stages prevailed, except in Sedgwick County, where the Little Arkansas overflowed its banks on the 7th and put 2,000 telephones in Wichita, Kans., out of commission for several days and caused damage amounting to more than \$40,000. The lower Arkansas was at a navigable stage during the greater part of the month although no high stages occurred.

There were no floods in Oklahoma and all streams were low during the entire month.

Only slight changes occurred in the Red River and there was a slight but steady fall in the upper reaches of this river.

Two slight rises occurred in the upper White River, the first from the 7th to 13th, and the second between the 19th and 24th; otherwise stages were low. The lower White was at a stage of 27.5 feet, on the first 4 days of the month, but there was a steady fall after the 4th to a stage of 19.8 feet on the 30th.

Below St. Louis changes in the Mississippi River were slight, although a moderate rise commenced at St. Louis on the 14th and was general at the close of the month. No high stages were recorded.

NOTES.

Oklahoma (J. Pemberton Slaughter, section director).—Conditions were unfavorable for agricultural interests over the greater part of the State, except for the maturing and picking of cotton. The rainfall averaged nearly normal, but it was very irregularly distributed. The soil has been too dry for sowing winter wheat over large areas in the central and western counties.

Missouri (George Reeder, section director).—Weather conditions were generally favorable for outdoor work, except that harvesting and seeding were interfered with by local rains.

Tennessee (Roscoe Nunn, section director).—The rainfall was unevenly distributed. The mean temperature was the highest of record for September.

Arkansas (H. F. Alciatore, section director).—This was the hottest September of record. The rainfall was unevenly distributed. A small tornado occurred about 3 miles east-northeast of Ozark in Franklin County on September 4. It moved from the southwest. Very little damage resulted.

SEVERE LOCAL STORM,

By RICHARD H. SULLIVAN, Local Forecaster, Wichita, Kans.

A heat wave of several days' duration culminated on September 6, 1911, followed by threatening weather in the southwest about 4 p. m. The first thunder peal was heard at 4.28 p. m., and a sprinkle began at 4.30 p. m. Precipitation was heavier at 5 p. m., when hail began falling with rain. The rain and hail continued with varying intensity until 6.10 p. m., when the hail ended and the rain continued, finally ending at 7.50 p. m.

Four distinct storm clouds, passing at intervals of about 15 minutes each, dropped hail of four different kinds, ranging in size from large peas and small marbles to large hen's eggs. The kinds and sizes were as follows: Solid snow, ice-coated, 0.25 to 1 inch in diameter; gnarled ice, 0.5 by 1 by 2 inches; solid ice, round, 0.75 to 1 inch in

diameter; alternate layers of ice and snow, some nearly round, some oval and some crescent shaped, the largest of which was 3 inches in diameter, 2.5 inches thick and 9.25 inches in circumference. Except in the weight of the larger stones, the hail was not heavy at any time. The stones came straight down mostly between the wind squalls of 25 to 42 miles per hour which prevailed at intervals as the storm clouds passed.

Excessive precipitation was recorded after 5.12 p. m., 0.73 inch being registered in 47 minutes. The hail, if placed on a level, approximated 0.2 inch in depth, and the estimated amount of water is 0.15 inch.

About 6 p. m., another thunderstorm developed a few miles west of the city and moved northeastward, with vivid lightning and heavy thunder. The storms finally massed in the northeast, and the last thunder was heard at 7.45 p. m.

Practically all the greenhouse roofs in the city were ruined, and thousand of skylights in the business districts and the northside windows in the residence sections were demolished, entailing a loss estimated at \$40,000.

During the progress of this series of storms the sky was visible in the northwestern and southeastern horizons nearly all the time. Reports from persons south of the city and from travelers coming from the north on the Interurban Railway show that the path of the general storm was about 7 miles wide, running irregularly from the southwest to the northeast.

About 9 p. m., on the 6th, another thunderstorm of marked intensity, with a brilliant display of lighting and extremely heavy thunder, began moving southeastward over the city. First thunder peal heard, 9.08 p. m. Light rain began at 9.25 p. m., precipitation becoming excessive at 10.06 p. m., 1.10 inches falling in 37 minutes. A heavy squall of 45 miles per hour from the northwest occurred at 9.39 p. m., followed by comparatively light winds about 10 p. m., and a gale of 47 miles from the west at 10.27 p. m.

There was a continuous roar of thunder from all parts of the heavens from 10 p. m. of the 6th to about 5.30 a. m. of the 7th. An unprecedently excessive rainfall began at 11.37 p. m. of the 6th and continued to 2.59 a. m. of the 7th, and an extraordinary total amount of 7.16 inches was measured for the period, 9.34 p. m. of the 6th to 6.26 a. m. of the 7th. The total amount for the 24 hours was 7.99 inches, the actual time during which rain fell being 10 hours and 36 minutes. This amount exceeds the previous highest 24-hour record on November 12-13, 1909, by 3.25 inches.

Other excessive amounts were recorded as follows: Greatest during any 5 minutes, 0.66; 10 minutes, 0.87; 15 minutes, 0.98; 30 minutes, 1.26; 1 hour, 1.86; 2 hours, 3.54.

Subsequent reports from neighboring towns and cities indicate that the heavy rains were confined to a radius of about 25 miles north and south of Wichita and 50 miles east and west.

The heavy rains in Wichita and to the northward of the city caused a rapid rise in the drainage canal in the old Chisholm Creek Basin in the eastern part of the city, and by the morning of the 7th there was a flood in the canal zone averaging about 1,600 yards wide. At Thirteenth Street and the canal bridge the water was 2.5 feet deep; at the Douglas Avenue bridge the water was 1.5 feet deep. Many houses built on low foundations in the drainage area were flooded to depths of 1 to 3 feet. The Arkansas River running through the western part of the city showed a rise of 1.8 feet to -3.6 feet on the gauge by 7 a. m., and the water continued at this stage until

TABLE I.—Climatological data for September, 1911. District No. 7, Lower Mississippi Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, 0.05 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
<i>Colorado.</i>																						
Blaine.	Baca.	3,935	19	71.7	+ 4.0	100	14	44	21	45	0.10	- 1.41	0.05	0	3	20	8	2	s.	M. M. Myers.		
Buena Vista.	Chaffee.	7,955	11	51.2	- 3.1	71	8	29	19	40	1.23	+ 0.74	0.25	T	7	26	1	3	nw.	C. A. Short.		
Calham.	El Paso.	6,700	4																H. B. Rice.			
Canon City.	Fremont.	5,343	23	66.8	+ 1.9	92	2†	41	18†	45	0.46	- 0.31	0.28	0	6	27	3	0	n.	U. S. Weather Bureau.		
Colorado Springs.	El Paso.	6,093	31	61.0	+ 0.6	85	12	35	19†	39	0.33	- 0.83	0.25	0	3	12	12	6	.....	Colorado College.	
Cripple Creek.	Teller.	9,396	10								0.79	- 0.79	0.54	0	6	6	6	0	sw.	F. G. Willis.		
Cuchara Camp.	Huerfano.	8,200	2								1.09		0.70	0	4	25	5	0	sw.	George A. Myers.		
Eads.	Kiowa.	4,209	4																w.	W. H. Lauck.		
Fairview.	Custer.	9,500	2								1.48		0.37	T.	10	7	20	3	e.	Elizabeth L. Gray.		
Fremont Fxp. Station.	El Paso.	8,850	1																.....	U. S. Forest Service.	
Garfield.	Chaffee.	9,510	1																w.	Lloyd N. Felton.		
Hamps.	Elbert.	5,400	18	63.2		88	12	34	21	43	1.74		0.45	T.	16	25	2	3	s.	W. Hamp.		
Hermit Lake.	Custer.	10,000	1																sw.	John E. Graham.		
Hochne (near).	Las Animas.	5,700	19	68.1	+ 5.5	93	1†	36	18	48	1.32	+ 0.06	0.60	0	5	26	6	8	sw.	S. W. De Busk.		
Holly.	Prowers.	3,380	16	72.4	+ 3.8	99	13	41	21	46	0.65	- 0.72	0.65	0	1	25	2	3	se.	Holly Sugar Co.		
La Junta.	Otero.	4,052																	s.	Fred B. Mason.		
Lake Moraine.	El Paso.	10,265	17	50.6	+ 3.2	68	12	27	7	30	1.24	- 0.35	0.83	0	6	9	17	4	sw.	Clyde C. McReynolds.		
Lamar.	Prowers.	3,592	21	74.8	+ 5.9	101	1†	42	20	46	0	- 1.22	0.00	0	0	14	15	1	w.	J. T. Lawless.		
Las Animas.	Bent.	3,899	43	72.2	+ 6.4	101	12†	38	21	54	0.52	- 0.49	0.22	0	3	16	6	8	ne.	F. M. Tague.		
La Veta Pass.	Costilla.	9,000	1										2.05						w.	Clara M. Wright.		
Leadville.	Lake.	10,248	15	48.4	- 0.1	72	11†	28	19†	38	1.52	- 0.65	0.46	0	12	10	12	8	.....	U. S. Weather Bureau.	
Limon (near).	Elbert.	5,360	4	64.8		92	12	36	18	43	0.47		0.37	0	3	22	5	3	s.	F. L. Palmer.		
Madrid.	Las Animas.												0.46						sw.	Thos. Sawers.		
Marshall Pass.	Saguache.	10,846	8										0.40						s.	W. L. Williams.		
Monument.	El Paso.	7,200		59.1		83	10†	29	18	48	0.71		0.37	0	4	14	6	10	e.	U. S. Forest Service.		
North Lake.	Las Animas.	8,700	19										2.05	+ 0.67	0.50	0	8	22	6	2	nw.	James W. Ingmire.
Pueblo.	Pueblo.	4,734	23	68.2	+ 3.8	94	12	41	21	46	0.32	- 0.30	0.15	0	6	13	13	4	nw.	U. S. Weather Bureau.		
Rocky Ford (near).	Otero.	4,177	22	69.0	+ 3.6	99	12	36	21	52	0.13	- 0.67	0.08	0	2	24	4	4	w.	P. K. Blinn.		
St. Elmo.	Chaffee.	9,500	2										2.16		0.45	0	14	15	9	6	sw.	Daniel Clark.
Salida.	do.	7,035	12	57.4	+ 0.2	85	12	23	21	45	0.84	- 0.23	0.27	0	5	28	1	1	w.	M. D. L. Buell.		
Santa Clara.	Huerfano.	8,252	16	59.4	+ 4.1	81	1†	31	18	39	0.58	- 1.70	0.16	0	5	7	23	0	.....	Lincoln G. Morris.	
Sheridan Lake.	Kiowa.	4,065	9	70.2		99	11	41	26	49	0.37		0.37	0	1	17	1	12	s.	Howard Gamble.		
Stonewall.	Las Animas.	8,000	5										1.29		0.40	0	7	12	10	8	G. A. Storz.
Trinidad.	do.	5,994	15										0.59	- 0.75	0.25	0	3	3	23	6	e.	Mrs. Mattie H. Butler.
Victor.	Teller.	10,100	7	53.8		71	11	34	19†	30	0.71	- 1.14	0.30	T.	3	23	6	1	e.	Fred Jones.		
Villas.	Baca.	3,935	20										0.20	- 1.41	0.11	0	3	19	10	1	sw.	Carrie Konkel.
Wayne.	El Paso.	7,864	17	58.2		84	12	29	21	48	0.67	- 0.66	0.30	0	7	11	9	10	sw.	J. C. Goff.		
Westcliffe.	Custer.	9,765	1			86	12	39	8†	33	0.68		0.35	0	4	15	9	6	s.	Zack Jordan.		
Winfield.	Chaffee.										1.42	- 0.04	0.30	0	8	0	15	15	nw.	John G. Payne.		
Woodman Sanatorium.	El Paso.	11,250	10																sw.	Dr. J. E. White.		
Wortman.	Lake.																		sw.	George C. Wortman.		
<i>New Mexico.</i>																						
Abbott.	Mora.	5,771	2			92	11†	45	21†	45	1.20		0.80	0	5	19	8	3	s.	Agent E. P. & S. W. R. R.		
Albert.	Union.	4,700	20	74.6	+ 1.3	98	21	49	20	42	1.91	+ 0.03	1.44	0	4				w.	Andrew Knell.		
Aurora.	Colfax.	8,849	2										0.85	0	14	3	22	5	.....	Miss Juanita Lucero.	
Bell Ranch.	San Miguel.	4,500	12	73.8		95	13†	52	21	40	1.72	+ 0.15	1.00	0	5	14	13	3	s.	C. M. O'Donel.		
Black Lake.	Colfax.	8,348	2										0.97		0.84	0	8	5	2	sw.	Ralph T. Martinez.	
Cabeza.	San Miguel.	5,406	2										2.07		1.25	0	4	6	23	1	sw.	Agent E. P. & S. W. R. R.
Campana.	do.	4,493	2										1.59		0.70	0	7	15	1	sw.	Do.	
Chacon.	Mora.	9,000	2										3.30		1.70	0	7	4	25	1	w.	Alfred Lucero.
Cimarron (near).	Colfax.	6,385	7	63.3		86	11	41	8†	40	1.88		0.86	0	5	15	11	4	w.	William French.		
Clayton.	Union.	5,178	6	70.8		95	11	43	19	44	1.52		0.93	0	4	25	3	2	s.	Dr. W. H. Chilton.		
Clivus.	Curry.	4,129		75.6		98	6	50	29	47	1.67		1.13	0	2	26	0	4	se.	J. H. Barry.		
Cuervo.	Guadalupe.	4,849	2	74.6		95	11	52	19†	34	2.14		1.32	0	7	13	16	1	s.	Agent E. P. & S. W. R. R.		
Dawson.	Colfax.	6,396	2										1.03		0.49	0	5	12	16	2	Do.
Elizabethtown.	do.	8,465	5	52.2		80	11	24	21	52	1.34		0.74	0	6	15	13	2	w.	Mabel Carrington.		
Folsom.	Union.	6,399	11	65.8	+ 5.1	90	11	36	18	46	0.32	- 1.41	0.64	0	3	26	4	0	sw.	David Rose.		
Fort Union.	Mora.	6,835	51	61.7	+ 1.0	83	11†	35	21	45	1.14	- 1.01	0.75	0	4	24	3	3	sw.	M. C. Needham.		
Hayden.	Union.	4,444	2	71.4		94	11	45	19†	39	0.99		0.60	0	5	18	11	1	s.	J. B. Dickson.		
Hoosier Ranch.	Mora.												1.55		1.03	0	5	17	11	2	sw.	W. H. Guthman.
Johnsons Park.	Colfax.	6,722	2										0.60		0.26	0	4	14	11	5	sw.	A. J. Meloche, Jr.
Kappus.	Quay.	4,010	1										1.20		0.70	0	5				s.	Anthony Kappus.
Lake Alice.	Colfax.	7,160	2										1.17		0.80	0	3	17	9	4	w.	John Campbell.
Logan.	Quay.	3,851	5	74.6		94d	4†	48d	21	41d	3.91		3.53	0	4	26	3	1	s.	John B. Reneau.		
Lykins (near).	Roosevelt.	5,000	1										0.75		0.43	0	4	21	7	2	sw.	J. G. Buchanan.
Maxwell (near).	Colfax.	5,894	4										0.48		0.35	0	2				s.	D. N. Jackson.
Melrose.	Curry.	4,400	3										2.75		1.18	0	4				w.	Dr. B. M. Porter.
Miami Ranch.	Colfax.	6,000	3	65.4		88	11	39	18†	41	1.33		0.85	0	3	13	17	0	w.	Farmer's Development Co.		
Montoya.	Quay.	4,335	2			95	24				1.45		0.70	0	3	13	9	8	w.	Agent E. P. & S. W. R. R.		
Mt. Dora (near).	Union.	5,600	1	67.1		92	11	36	21	43	1.70		0.90	0	7	17	10	3	sw.	Edwin F. Grygia.		
Nara Visa.	Quay.	4,225	5	73.6		94	17	53	19	37	1.39		0.72	0	5							

TABLE 1.—Climatological data for September, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Texas.</i>																					
Amarillo.	Potter.	3,676	19	75.2	+ 7.5	95	5	54	19	36	0.83	- 1.53	0.41	0	4	16	13	1	s.	U. S. Weather Bureau.	
Archer City.	Archer.	1									2.04	- 0.76	0	5	24	5	5	1	s.	Charles T. Thuman.	
Arthur City.	Lamar.	590	19								0.03	- 2.67	0.03	0	1	24	2	4	s.	V. V. Bright.	
Bonham.	Fannin.	566	8	84.6		107	12	65	17	34	0.37	- 0.22	0	2						H. M. Norman.	
Canadian.	Hemphill.	2,339	4	78.6		102	6	50	19	36	1.41	- 1.60	1.10	0	4					Canadian Academy.	
Childress.	Childress.	1,869	18								1.60	- 0.47	0.90	0	2	16	5	9	s.	W. E. Davis.	
Chillicothe.	Hardeman.	1,406	3								3.04	- 0.47	2.33	0	4					A. B. Connor.	
Clarendon.	Donley.	2,719	6	77.7		104	5	51	21	44	3.69	- 2.41	3.58	0	2	23	5	2	se.	Whitfield Carhart.	
Clarksville.	Red River.	442	11	82.9	+ 4.6	101	15	56	9	43	1.00	- 1.23	1.00	0	1	22	7	1		J. W. O'Neill.	
Claude.	Armstrong.	3,397	6								1.23	- 0.69	1.40	0	3	23	3	4	sw.	F. L. Kennard.	
Dalhart.	Dallam.	3,988	6	72.6		96	11	43	22	47	0.52	- 0.24	0.36	0	4	23	5	0	sw.	E. B. Wilson.	
Denison.	Grayson.	11									1.88	- 0.87	0.50	0	5	25	0	5	s.	Robert L. Smith.	
Flinley.	Bowie.	1									1.05	- 0.73	0.3	0	3	23	4	3	s.	C. K. Brown.	
Henrietta.	Clay.	915	19	81.6	+ 4.1	100	18	62	19	32	1.87	- 0.73	1.88	0	4	23	0	7	sw.	A. C. Elliott.	
Hereford.	Deaf Smith.	3,750	6	75.3		99	17	52	21	39	0.40	- 0.46	0.46	0	1	23	0	7	s.	Ft. W. & D. C. Ry.	
Memphis.	Hall.	2,067	6			100	5	46	21	39	3.04	- 2.82	2.82	0	3	24	5	1	s.	J. E. Kinney.	
Miami.	Roberts.	2,743	5	77.8															s.	Dr. W. J. Joss.	
Mobeetie.	Wheeler.	17																	Rev. P. A. Kaelin.		
Nazareth.	Castro.	5									1.66	- 0.70	0	6						S. J. Allen.	
Ochiltree.	Ochiltree.	3																	B. E. Finley.		
Pampa.	Gray.	3,226	2																J. Sid O'Keefe.		
Panhandle.	Carson.	3,450	2																Robert A. Miller.		
Paris.	Lamar.	592	22	83.0	+ 6.0	104	12	60	1	33	0.34	- 2.19	0.12	0	4	25	2	3	s.	C. S. Solomon.	
Plemons.	Hutchinson.	4	76.6			99	14	40	21	47	0.71	- 0.30	0	5	22	6	2	s.	William H. Crawford.		
Quanah.	Hardeman.	1,563	6	82.1		101	7	57	19	29	1.25	- 0.60	0	3	22	2	6	s.	H. J. Palmer.		
Ringo Crossing.	Hopkins.	1									1.99	- 0.70	1.20	0	3	22	2	6	sw.	R. S. Chamberlain.	
Romero.	Hartley.	1	74.0			94	11	53	4	40	1.75	- 2.67	0.85	0	4	18	10	2	s.	R. A. Gibbs.	
Sherman.	Grayson.	745	18	82.6	+ 6.7	98	12	66	2	27	0.97	- 0.24	0.24	0	4	19	7	4	s.	J. W. Elliott.	
Stratford.	Sherman.	3,669	17	73.3		99	11	45	21	45	0.38	- 0.70	0.70	0	4	23	2	5	s.	John Neely.	
Sulphur Springs.	Hopkins.	530																	Ft. W. & D. C. Ry.		
Texline.	Dallam.	4,094	6								1.62	- 0.73	1.62	0	1				Lou Mulhall.		
Tulia.	Swisher.	3,501	13	74.4		99	6	51	21	40	3.05	+ 0.73	2.55	0	5	11	19	0	s.	R. A. Thompson.	
Wichita Falls.	Wichita.	958	19								0.73	- 1.97	0.36	0	5	23	4	3	s.		
Winfield.	Titus.	1									3.54	- 0.86	0.86	0	9	19	9	2	se.	J. C. Bostick.	
<i>Kansas.</i>																					
Alden.	Rice.	1,684	1								0.99	- 0.02	0.44	0	3	20	0	10	se.	L. B. Wait.	
Anthony.	Harper.	1,329	14	78.4		103	14	49	19	40	2.36	- 0.02	0.92	0	8	14	11	5	sw.	R. H. Beebe.	
Ashland.	Clark.	1,951	23	77.0	+ 7.1	104	14	49	19	39	3.40	+ 1.35	2.08	0	7	16	12	2	se.	C. W. Carson.	
Burlington.	Coffey.	1,010	18	76.0	+ 5.4	98	2	48	21	38	7.41	+ 3.12	1.75	0	10	5	22	3	s.	O. E. Sanford.	
Chanute.	Neosho.	940	7	75.6		97	12	48	21	34	5.97	- 0.24	0.31	0	3	19	13	5	se.	C. W. Brown.	
Cimarron.	Gray.		75.9			105	11	45	19	42	0.31	- 0.24	0	0	3	19	3	6	s.		
Coldwater.	Comanche.	2,090	14	77.2	+ 7.1	101	13	47	19	34	2.70	+ 0.44	1.13	0	6	19	7	4	s.	J. L. Stanley.	
Columbus.	Cherokee.	898	21	74.9	+ 3.9	93	25	49	22	30	4.74	- 0.84	2.82	0	9	20	5	5	sw.	O. E. Skinner.	
Coolidge.	Hamilton.	3,348	14	70.0	+ 3.0	100	12	43	25	49									s.	W. R. Padley.	
Cottonwood Falls.	Chase.	1,234	7	75.3		97	6	45	19	32	4.30	- 0.72	1.72	0	9	16	5	9	s.	E. B. Greene.	
Council Grove.	Morris.	1,234	2	74.8		96	2	45	19	34	4.33	- 0.15	2.15	0	11	6	20	4	sw.	J. P. Blackledge.	
Cunningham.	Kingman.	1,080	27	79.8	+ 9.0	105	14	47	19	32	4.38	- 0.48	2.32	0	6	11	12	4	s.	W. H. Morton.	
Dodge City.	Ford.	2,513	37	74.9	+ 6.7	100	13	46	19	35	3.71	- 1.40	0.27	0	5	16	11	3	s.	U. S. Weather Bureau.	
El Dorado.	Butler.	1,291	9	75.3		97	6	48	19	38	7.24	- 0.37	3.72	0	8	15	11	4	s.	W. Y. Miller.	
Ellinwood.	Barton.	1,790	36	76.4	+ 7.4	105	13	49	19	41	0.82	- 1.37	0.30	0	8	17	8	5	sw.	Martin Musil.	
Emporia.	Lyons.	1,138	30	74.2	+ 6.1	99	14	46	21	34	3.67	+ 0.11	0.92	0	10	11	13	6	s.	W. H. Boyles.	
Eureka.	Greenwood.	1,079	15	75.4		98	6	47	21	35	3.97	+ 1.82	3.05	0	8	18	8	4	se.	W. S. Moonlight.	
Fall River.	do.	925	15	74.5	+ 4.0	98	6	45h	22	38	4.95	+ 0.59	1.75	0	6	22	6	2	s.	J. McDaniel.	
Fargo.	Seward.	1									0.14	- 0.68	0.68	0	2	25	5	0	s.	N. B. Swink.	
Fredonia.	Wilson.	864	8	76.7		98	12	50	21	35	5.04	- 1.56	0.15	0	2	14	13	3	s.	B. W. Holmes.	
Garden City.	Finney.	2,836	22	74.6	+ 5.2	103	13	40	19	35	5.04	- 1.56	0.15	0	2	14	13	3	s.	B. F. Stocks.	
Great Bend.	Barton.	1,850	2																I. Pritchard.		
Greensburg.	Kiowa.	2,235	4	76.2		102	13	46	19	39	2.66	- 0.90	0.90	0	7	22	2	6	s.	C. C. Raymond.	
Grenola.	Elk.	1,116	23	76.4	+ 6.1	98	6	48	22	36	8.71	+ 5.12	5.20	0	8	17	7	6	sw.	W. H. Lawyer.	
Hess.	Gray.	2,700	5	74.2		100	12	53	17	41	0.67	- 0.42	0	2	7	16	4	0	se.	Fred Mallonee.	
Howard.	Elk.	1,112	4	75.4		107	13	38	19	52	0.34	- 0.51	3.82	0	5	19	4	7	s.	J. W. Eby.	
Hugoton.	Stevens.	7	75.4								0.13	- 0.15	1.51	0	8	16	8	6	s.	E. M. Anderson.	
Hutchinson.	Reno.	1,535	21	76.9	+ 6.6	103	14	45	19	39	3.17	+ 0.19	1.51	0	8	16	8	6	s.	E. S. Webster.	
Independence.	Montgomery.	800	37	77.8	+ 5.6	98	6	45	22	39	3.70	- 0.23	1.92	0	8	19	4	7	s.	F. L. Kenoyer.	
Iola.	Allen.	984	5	75.5	+ 6.9	96	13	50	19	31	6.01	+ 2.66	2.91	0	11	13	11	6	s.	U. S. Weather Bureau.	
Irene.	Hamilton.	3,440	1	73.4		103	13	41	21	50	0.02	- 0.02	0.02	0	1	13	11	6	s.	N. M. Herbig.	
Jetmore.	Hodgeman.	2,268	10	75.2		104	11	41	19	45	0.92	- 0.53	0.40	0	5	10	15	5	sw.	James Aiken.	
Kingman.	Kingman.	1,504	3	77.6																	

TABLE 1.—Climatological data for September, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unadjusted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
Kansas—Continued.																					
Walnut.	Crawford.	940	9	75.9 d		97	13+	52	20	26	7.20	—	4.99	0	7	16d	7d	3d	sw.	R. C. Harlan.	
Wellington.	Sumner.	1,225	15	80.0	+ 10.0	104	13+	46	19	41	1.69	— 1.40	0.84	0	7	13	10	7	s.	E. O. G. Kelly.	
Wichita.	Sedgwick.	1,377	24	76.1	+ 6.3	97	14	51	19	10	5.56	+ 7.43	7.99	0	8	16	9	5	s.	U. S. Weather Bureau.	
Winfield.	Cowley.	1,124	17																M. B. Light.		
Yates Center.	Woodson.	1,068	32	75.2	+ 6.6	98	6	45	21	37	6.88	+ 2.76	2.45	0	7	13b	11b	4b	s.	J. W. Tipton.	
Oklahoma.																					
Ada.	Pontotoc.	1,001	3	80.2		97	12	60	19	29	2.12		1.68	0	2	23	6	1	s.	R. J. Brooks.	
Alva.	Woods.	1,350	6	79.9		103	14	50	19	37	2.36		1.70	0	3	15	0	15	e.	S. A. Stech.	
Apache.	Caddo.	1,255	2	79.5		99	12	55	19	39	4.28		1.70	0	4	22	8	0	sw.	G. D. Teeter.	
Arapaho.	Custer.	1,575	17	80.3	+ 6.4	101	5+	56	22	40	0.81	— 2.03	0.33	0	4	24	6	0	s.	J. C. Brower.	
Ardmore.	Carter.	872	10	81.4	+ 5.1	99	12	58	8	32	3.31	— 0.06	2.28	0	5	22	2	6	s.	H. T. Nisbett.	
Arnett.	Ellis.	2,136	7	77.4		98	6	48	19	35	1.15		0.50		5	23	8	0	s.	C. H. Holmes.	
Bartlesville.	Washington.	687	3	78.0		101	12	42	18	43	1.76		0.90	0	5	23	4	6	sw.	Dr. A. P. Owens.	
Beaver.	Beaver.	2,500	15	77.4	+ 5.7	100	13+	49	19	40	0.92	— 1.14	0.45	0	8	24	2	4	se.	W. C. Frazer.	
Blackburn.	Pawnee.	800	10	80.6	+ 8.2	99	6+	54	22	35	2.34	— 3.61	0.90	0	4	21	4	5	s.	M. M. Rhodes.	
Cache.	Comanche.	1,350	5	77.8		96	11	55	2+	38	4.07		2.25	0	3	23	1	6	s.	Mrs. Frank Rush.	
Calvin.	Hughes.	713	6												6	24	0		s.	Thomas Purcell.	
Chandler.	Lincoln.	865	10	79.8	+ 5.2	98	12	57	19+	30	4.39	+ 2.11	1.75	0	7	22	0	8	s.	Chas. L. Kern.	
Chattanooga.	Comanche.	1,150	5	81.2		100	18	62	2+	34	3.79		2.08	0	4	17	11	2	sw.	Squire Humble.	
Chickasha.	Grady.	1,091	10	81.0	+ 5.5	101	5+	57	40	2.28	+ 0.06	1.10	0	3	28	2	0	w.	J. C. Good.		
Cloud Chief.	Washita.	1,400	9	81.7		102	5	56	19	39	1.60		1.10	0	4	15	10	5	s.	J. P. Stutzman.	
Durant.	Bryan.	643	10	81.3	+ 5.8	99	12+	60	1	33	3.34	+ 0.76	2.26	0	3	23	1	6	s.	Nelson Houk.	
Eldorado.	Jackson.	1,456	4	81.2		101	5	55	35+	35+	0.97		0.59	0	3	16	13	1	s.	T. W. Lanham.	
Elk City.	Beckham.	77.5		94	3+	55	8	32	0.83		0.65		0	4	22	8	0	s.	R. J. Carlile.		
El Reno.	Canadian.	1,400	20	81.9	+ 9.9	100	5	56	39	2.16	— 0.84	1.50	0	4	14d	9	1	sw.	Rose E. Walter.		
End.	Garfield.	1,269	10	80.2	+ 6.4	103	12+	57	22	39	1.94	— 1.09	0.78	0	6	22	7	1	s.	Uri B. Worcester.	
Erick.	Beckham.	2,058	6	77.4		101	5	53	35+	1.07		0.81	0	2	20	7	3	s.	A. W. Hanes.		
Fairland.	Ottawa.	839	11	77.8	+ 4.6	97	12+	53	22	32	5.76	+ 2.87	2.85	0	8	17	6	6	c.	C. W. Prier.	
Fort Gibson.	Muskogee.	556	11												6	22	2	6	s.	John T. Welsh.	
Frederick.	Tillman.	1,293	5	81.0		99	7+	56	19	29	3.41		2.02	0	3	23	6	1	se.	B. B. Bradley.	
Goodwell.	Texas.	3,300	1																s.	S. W. Black.	
Guthrie.	Logan.	1,000	18	82.0	+ 7.9	102	5+	58	2	41	2.25	— 0.83	1.00	0	3	24	2	4	s.	S. E. Snyder.	
Guymon.	Texas.	3,133	2																a.	L. Mordt.	
Harrington.	Roger Mills.	2,200	7	77.8		100	5+	53	19	37	1.70		1.20	0	3	19	10	1	sw.	T. Compton.	
Hartshorne.	Pittsburg.	700	12	82.2	+ 4.8	98	12	61	1	31	1.56	— 1.40	0.50	0	4	24	3	3	s.	Robt. Holmes.	
Healdton.	Carter.	900	17	80.0	+ 4.3	99	12	58	1	40	3.25	+ 1.08	1.85	0	5	23	7	0	s.	C. H. Heald.	
Helena.	Alfalfa.	1,396	3	81.9		99	6+	60	35+	1.99		0.90	0	7	18	11	1	s.	R. E. Ellis.		
Hennessey.	Kingfisher.	1,166	16	81.8	+ 7.2	103	5	53	38	2.32	— 0.55	0.87	0	5	12	17	1	s.	Mrs. M. C. Parks.		
Hobart.	Klawa.	1,396	8	80.1		101	5	56	19	39	0.93		0.35	0	6	17	11	2	se.	Leland Turnbull.	
Holdenville.	Hughes.	900	10	80.2	+ 6.3	99	12	59	19+	28	2.64	— 1.55	1.40	0	8	23	6	1	s.	Eula L. Rutherford.	
Hooker.	Texas.	3,038	5	76.6		104	13	44	19	46	0.63		0.40	0	6	16	0	14	s.	H. N. Kelly.	
Hurley.	Cimarron.	4,200	3	71.7		97	13	42	19	39	1.23		0.65	0	4	23	1	sw.	Dr. C. W. Meyers.		
Idabel.	McCurtaun.	474	3	81.4		103	13+	61	1+	31	2.40		1.30	0	3	26	2	2	s.	M. L. Henderson.	
Jefferson.	Grant.	1,062	17	78.0	+ 4.7	99	6+	65	24	47	2.28	— 0.73	0.92	0	1	21	8	1	se.	T. E. Beck.	
Kenton.	Cimarron.	4,000	10	72.2	+ 3.9	98	11	38	21	48	0.61	— 1.05	0.30	0	6	18	7	5	s.	Wm. M. Guy.	
Kingfisher.	Kingfisher.	1,046	14	81.5	+ 6.9	100	12	57	22	40	0.90	— 2.30	0.46	0	8	18	10	2	s.	J. C. Cross.	
McAlester.	Pittsburg.	698	15	82.2		100	12	61	19	34	3.74	+ 0.51	1.64	0	5	27	0	3	s.	Wm. Noble.	
McComb.	Pottawatomie.	1,200	17																s.	J. E. McNair.	
Mangum.	Greer.	1,585	18	80.4	+ 5.7	105	4	58	19	37	1.93	— 0.43	1.50	0	4	22	5	3	se.	F. D. Dodson.	
Marlow.	Stephens.	1,292	10	79.8	+ 6.0	98	13	58	20	30	3.28	— 0.26	1.48	0	4	23	3	4	se.	Wm. B. Anthony.	
May.	Harper.																		s.	G. C. Gray.	
Meeker.	Lincoln.	1,030	17	80.6	+ 5.9	101	12	56	18+	42	3.42	+ 0.88	2.50	0	3	23	2	5	s.	Dr. J. H. Baugh.	
Muskogee.	Muskogee.	614	12	79.1	+ 4.7	97	12	59	19	38	3.53	+ 0.75	1.30	0	6	23	3	4	s.	J. Harry Randall.	
Mutual.	Woodward.	3	79.8			102	15	47	19	38	0.91		0.38	0	3	22	3	5	s.	Thos. Martin.	
Neola.	Caddo.	1,500	5	79.6		99	5+	55	19	38	1.80		0.90	0	3	18	11	1	s.	R. N. Schooling.	
Newkirk.	Kay.	1,149	13	80.8	+ 7.1	102	5+	54	21	43	4.75	— 0.35	1.01	0	6	12d	13	12d	se.	P. H. Albright & Co.	
Norman.	Cleveland.	1,171	16	79.0	+ 4.3	97	12	57	19	37	2.77	+ 0.36	1.04	0	4	16	13	1	s.	S. E. Boyd.	
Oakwood.	Dewey.	1,854	1	77.7		99	5	55	54	1+	43	1.80		1.02	0	5	19	9	2	s.	Dr. F. P. Osborn.
Okeene.	Blaine.	1,194	7	81.0		102	13	55	22	38	0.65		0.31	0	7	23	6	1	s.	Dr. L. H. Murdoch.	
Oklahoma.	Oklahoma.	1,247	20	80.0	+ 7.9	98	13	56	19	30	1.38	— 1.37	0.87	0	4	21	5	4	s.	U. S. Weather Bureau.	
Oklmulgee.	Oklmulgee.	752	7	79.3		98	9+	58	19	32	2.22		2.00	0	6	21	0	9	s.	J. L. Maynard.	
Pauls Valley.	Garvin.	880	11	80.6	+ 7.2	99	12	51	19	31	1.00	— 2.72	0.59	0	3	21	7	2	sw.	A. M. Foss.	
Pawhuska.	Osage.	918	10	80.6	+ 8.4	103	13	49	21	41	2.09	— 1.27	0.80	0	9	19	6	5	s.	R. C. Block.	
Perry.	Noble.	920	12	81.0	+ 6.2	102	28	57	22	34	5.50	+ 2.70	3.00	0	7	17	5	8	s.	G. C. Wollard.	
Ravia.	Johnston.	796	8	80.7		98	12+	61	19	30	4.47		3.20	0	4	25	3	2	s.	G. C. Guptill.	
Sac and Fox Agency.	Lincoln.	900	18	79.4	+ 5.0	95	6+	57	19	27	5.39	+ 2.88	2.22	0	5	23	3	4	sw.	M. R. Gayle.	
Shawnee.	Pottawatomie.	1,041	10	78.6	+ 4.7	96	12+	56	19+	32	4.00	+ 1.00	1.87	0	5	14	10	6	se.	Mrs.	

TABLE 1.—Climatological data for September, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Number of cloudy days.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmodified.	Number of rainy days 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Missouri—Continued.</i>																				
Koshkonong.....	Oregon.....	911	12	75.8	+ 5.3	94	12	53	22	29	2.09	- 1.29	0.47	0	12	13	13	4	se.	J. W. Hitt.
Lamar §§.....	Baron.....	964	31	76.0	+ 5.6	97	12	53	21	27	5.95	+ 1.82	3.65	0	9	17	5	8	se.	E. H. Adams.
Marble Hill.....	Bollinger.....	420	20	74.8	+ 4.2	98	12	49	22	38	4.13	+ 0.48	1.04	0	10	17	13	0	s.	A. F. Hendrix.
Mountaintrove.....	Wright.....	1,400	13	73.8	+ 5.3	94	12	50	22	29	3.53	- 0.16	0.72	0	13	16	7	7	s.	Mo. Fruit Exp. Sta.
Mount Vernon.....	Lawrence.....	1,480	35	75.2	+ 3.7	97	12	52	22	30	2.61	- 0.91	0.45	0	9	19	5	6	sw.	J. R. White & Son.
Neosho.....	Newton.....	1,023	29	75.8	+ 5.4	95	12	48	22	35	4.76	+ 0.47	1.33	0	10	22	5	3	sw.	W. O. Buck.
New Madrid.....	New Madrid.....	285	18	74.0	+ 4.0	94	2†	53	20	32	8.90	+ 5.17	2.21	0	11	21	1	8	s.	Miss Josie Smith.
Oakfield.....	Franklin.....	793	20	74.4	+ 4.0	94	2†	49	22	29	2.64	- 1.41	0.70	0	8	18	12	0	sw.	E. E. Steines.
Olden.....	Howell.....	1,246	22	75.4	+ 5.7	94	12	49	22	33	3.68	- 0.12	1.59	0	11	20	4	6	sw.	J. D. Evans.
Rolla.....	Phelps.....	1,139	31	75.4	+ 8.8	96	12	49	22	33	3.68	- 0.12	1.59	0	10	15	11	4	s.	Prof. P. J. Wilkins.
Springfield.....	Greene.....	1,350	23	74.2	+ 6.3	92	12	53	22	27	4.38	+ 0.62	1.73	0	10	15	11	4	s.	U. S. Weather Bureau.
Steelville.....	Crawford.....	746	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Edwin Pumphrey.	
<i>Kentucky.</i>																				
Blandville.....	Ballard.....	445	29	76.4	+ 5.4	93	12	55	22	27	3.39	+ 0.41	0.77	0	12	7	19	4	sw.	E. W. Horr.
Lynnville.....	Graves.....	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<i>Tennessee.</i>																				
Arlington.....	Shelby.....	29	78.4	+ 6.8	97	14†	54	23†	35	0.86	- 1.50	0.44	0	3	16	8	6	s.	A. Thomas B. Etheridge.	
Bolivar.....	Hardeman.....	450	24	77.8	+ 5.9	95	14	54	22	32	0.19	- 2.70	0.15	0	2	25	1	4	s.	Miss Mary A. Smith.
Brownsville.....	Haywood.....	361	26	78.2	+ 5.8	93	12†	54	22	31	0.27	- 1.32	0.40	0	6	10	14	0	n.	Miss Hattie N. Moses.
Covington.....	Tipton.....	311	24	77.4	+ 4.8	93	13†	54	22†	28	1.09	- 1.54	0.90	0	4	26	0	4	s.	James S. Ruffin.
Dyersburg.....	Dyer.....	310	28	78.6	+ 0.3	96	14	55	23†	29	4.50	+ 1.55	1.80	0	9	26	1	3	se.	Miss Martha A. Sinclair.
Jackson.....	Madison.....	450	18	79.7	+ 6.8	99	13	54	23	43	4.40	+ 1.87	1.30	0	6	18	11	1	s.	Shelby A. Robert.
Kenton.....	Obion.....	325	9	78.6	98	27	52	22	33	2.68	0.77	0	0	12	17	9	4	sw.	George S. Martin.	
Memphis.....	Shelby.....	409	40	79.8	+ 7.0	94	13	58	22	22	0.16	- 2.89	0.10	0	5	16	12	2	s.	U. S. Weather Bureau.
Milan.....	Gibson.....	440	28	76.8	+ 5.1	92	15†	55	23†	30	3.37	+ 0.46	1.16	0	10	15	6	9	s.	Orlando F. Cantwell.
Trenton.....	do.....	345	28	76.6	+ 5.6	95	28	49	23	37	1.82	- 1.18	0.52	0	8	21	7	2	s.	F. I. Denison.
Union City.....	Obion.....	300	13	80.4	+ 7.6	105	3†	53	22	36	4.57	+ 1.54	1.12	0	8	21	9	0	w.	J. B. Kimzey.
<i>Arkansas.</i>																				
Alicia.....	Lawrence.....	7	78.6	96	18	54	23	29	1.70	.....	1.10	0	4	25	4	1	s.	McCullough & Guelck.		
Amity.....	Clark.....	250	19	79.6	95	11†	60	1	27	1.07	.....	0.57	0	4	22	8	0	sw.	J. W. Campbell.	
Arkadelphia (near).....	do.....	250	4	79.6	95	11†	60	1	27	1.07	.....	0.02	0	1	.....	.....	.....	.....	.....
Batesville.....	Independence.....	145	28	78.7	+ 4.9	98	12†	54	22	33	4.18	+ 1.51	0.84	0	11	18	8	4	s.	J. A. Ross.
Bee Branch.....	Van Buren.....	19	78.7	+ 4.9	98	12†	54	22	33	5.45	+ 1.51	1.55	0	6	18	8	4	s.	W. C. Blundell.	
Benton.....	Saline.....	283	4	79.2	99	12	57	1†	33	9.10	.....	3.30	0	4	21	9	0	s.	Lelia I. Teter.	
Bentonville.....	Benton.....	1,303	6	75.8	+ 6.9	95	12	53	22	29	5.90	+ 2.43	1.72	0	7	23	3	4	s.	P. B. Jackson.
Bergman.....	Boone.....	1,324	15	71.2	+ 0.8	94	12	46	22	33	5.83	+ 2.27	1.78	0	7	24	4	2	sw.	U. S. Weather Bureau.
Black Rock.....	Lawrence.....	259	7	79.9	+ 6.7	101	12	56	1†	40	1.03	- 1.56	0.65	0	10	25	4	1	s.	John T. Maxey.
Brinkley.....	Monroe.....	226	25	79.9	+ 6.7	101	12	56	1†	40	1.03	- 1.56	0.65	0	2	25	4	1	s.	S. J. Howe.
Calico Rock.....	Phillips.....	361	7	79.0	+ 6.7	97	12	57	22	29	6.95	.....	1.60	0	6	25	4	1	s.	H. L. D. Whitson.
Camden.....	Ouachita.....	158	26	81.1	+ 6.7	99	13	59	1	30	0.80	- 2.55	0.48	0	3	25	4	1	s.	W. H. Stoner.
Centerpoint.....	Howard.....	470	11	80.0	+ 5.3	101	14	60	1	29	7.72	- 1.84	1.00	0	6	17	8	5	sw.	R. H. Quarterman.
Clarendon.....	Monroe.....	171	7	78.9	+ 5.6	97	12	55	22	29	6.30	+ 1.74	0.96	0	3	19	10	1	s.	J. M. Huddleston.
Conway.....	Faulkner.....	308	28	78.9	+ 5.6	97	12	57	22	29	6.30	+ 1.74	0.96	0	6	19	10	1	s.	Mrs. B. E. Bishop.
Corning.....	Clay.....	293	19	78.8	+ 7.9	97	12	55	22	33	4.61	+ 0.92	1.55	0	11	25	4	1	s.	G. Burr.
Dardanelle.....	Yell.....	330	25	78.9	98	12†	56	1	32	5.67	+ 2.60	1.58	0	8	25	4	1	s.	Jacob Brobst.	
Dodd City.....	Marion.....	1,175	30	75.6	+ 4.0	94	5†	51	20	30	7.36	+ 3.60	3.40	0	6	25	4	1	s.	A. Bernard.
El Dorado.....	Madison.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Neal Dodd.	
England.....	Union.....	265	7	81.2	98	12	61	1	29	0.00	.....	0.00	0	0	2	25	4	1	s.	J. M. Ricketts.
Eureka Springs.....	Lonoke.....	1,465	9	80.5	98	12†	60	1†	28	6.40	.....	4.25	0	3	21	4	5	sw.	J. F. Babb.	
Fayetteville.....	Carroll.....	1,451	22	77.6	+ 6.4	95	12†	53	22	32	9.61	+ 6.03	3.20	0	9	21	4	5	sw.	J. C. Chenault.
Fordyce.....	Washington.....	81.0	20	80.0	+ 7.3	98	13	61	22	24	4.42	+ 1.25	0.56	0	4	22	7	1	e.	University of Arkansas.
Fort Smith.....	Sebastian.....	481	29	80.0	+ 7.3	98	13	61	22	24	4.42	+ 1.25	0.56	0	2	25	4	1	e.	A. Tredick.
Fullerton.....	Hempstead.....	264	7	81.2	98	12	61	1	29	0.00	.....	0.00	0	0	2	25	4	1	e.	U. S. Weather Bureau.
Hardy.....	Sharp.....	643	13	77.0	+ 4.8	97	13	53	22†	31	4.04	+ 0.23	1.48	0	3	21	4	5	sw.	B. C. Logan.
Helena.....	Phillips.....	182	26	79.6	+ 5.4	98	12	58	22	29	0.56	- 3.08	0.34	0	3	21	4	5	sw.	B. F. Modisett.
Hot Springs.....	Garland.....	600	5	80.2	100	12†	58	1	31	4.30	.....	3.10	0	0	2	19	11	0	w.	Hot Springs Water Co.
Huttig.....	Union.....	85	4	81.9	99	13	63	26	31	0.03	.....	0.03	0	1	4	26	0	0	s.	C. A. Berry.
Jonesboro.....	Craighead.....	345	16	78.2	+ 4.0	100	13	50	23	39	2.55	- 1.21	0.99	0	8	1	28	1	s.	Benedictine Sisters.
Junction.....	Union.....	18	80.2	+ 5.6	97	12	56	1	30	0.53	- 1.38	0.32	0	2	21	5	4	sw.	J. A. Lowderback.	
Lake Farm.....	Jefferson.....	195	4	80.0	101	13	56	1†	35	0.70	.....	0.70	0	0	1	19	11	0	s.	R. H. Gillispie.
Lewisville.....	Lafayette.....	262	8	83.8	102	27†	60	1	34	0.64	.....	0.23	0	0	4	18	8	4	sw.	F. W. Youmans.
Little Rock.....	Pulaski.....	357	32	79.4	+ 6.3	96	12	59	22	22	6.43	+ 3.17	2.57	0	6	18	8	4	sw.	U. S. Weather Bureau.
Malvern.....	Johnson.....	775	14	77.5	+ 4.3	96	13	58	1†	29	7									

TABLE 1.—Climatological data for September, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Number of cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of clear days.					
<i>Mississippi.</i>																				
Anguilla.	Sharkey.	107	3	80.8		96	9†	63	1†	29	0.10		0.10	0	1	23	6	1	se.	E. W. Cook.
Austin.	Tunica.	200	15	80.2	+ 6.5	100	12	56	2†	36	0.72	- 2.75	0.28	0	4	28	2	0	w.	H. J. Irvine.
Batesville.	Panola.	230	24	81.6	+ 8.4	101	14	55	22	40	0.77	- 2.32	0.70	0	2	27	2	1	se.	J. M. Cox.
Byhalia.	Marshall.	390	2								1.50		1.43	0	4	25	5	0	s.	Tallahatchie Drainage Com.
Canton.	Madison.	228	21	82.2	+ 6.5	101	14	63	1	32	0.42	- 2.55	0.17	0	8	17	13	0	se.	Dr. G. W. Smith-Vaniz.
Charleston.	Tallahatchie.	1						55	23	32	0.91		0.50	0	2				w.	W. B. Burke.
Clarksdale.	Coahoma.	177	4	80.4		97	12†	59	22	31	0.34	+ 0.83	0.78	0	4	17	13	0	s.	A. C. Tuttle.
Coffeeville.	Yalobusha.	241	2		+ 7.4	99	14	57	22	31	0.34		0.20	0	7	20	5	5	se.	Tallahatchie Drainage Com.
Corinth.	Alcorn.	470	23	79.8	+ 7.4	99	14	57	22	31	0.34		0.23	0	4	18	12	0	se.	M. A. Candler.
Crenshaw.	Panola.	187	2										0.15	0	1				w.	Tallahatchie Drainage Com.
Denmark.	Lafayette.																		Do.	Do.
Duck Hill.	Montgomery.	12	81.0	+ 6.3	100	13	59	37	0.43	- 2.66	0.33	0	2	13	11	0	0	ne.	W. H. Eskridge.	
Edwards.	Hinds.	222	24	82.5	+ 5.6	98	13†	67	23†	30	0.05	- 0.17	1.65	0	4	25	4	1	s.	E. F. Farr.
Enid.	Tallahatchie.	2											0.69	0	3				sw.	Tallahatchie Drainage Com.
Fayette.	Jefferson.	270	10	81.0	+ 5.6	97	13†	61	26	33	2.83	- 1.44	2.40	0	3	19	11	0	se.	T. L. Darden.
Greenville.	Washington.	126	24	81.4	+ 5.7	96	12†	63	1	28	4.04	+ 0.99	3.33	0	4	24	2	4	ne.	F. L. Harbison.
Greenwood.	Leflore.	140	11	81.8	+ 6.7	100	12†	61	1	34	0.05	- 3.10	0.05	0	1	23	5	2	sw.	J. H. Stephen.
Grenada.	Grenada.	124	2								0.67		0.54	0	3	28	2	0	s.	Tallahatchie Drainage Com.
Hernando.	De Soto.	391	23	80.7	+ 6.6	98	27	59	22†	32	1.23		0.90	0	2	22	1	7	sw.	W. F. Wood.
Hickory Flat.	Benton.	435	2								1.20		0.95	0	5	19	11	0	sw.	Tallahatchie Drainage Com.
Holly Springs.	Marshall.	600	24	79.0	+ 5.3	94	27	57	22	26	0.35	- 1.02	1.60	0	6	21	2	7	se.	L. B. Mosby.
Kosciusko.	Attala.	430	21	81.0	+ 6.0	99	13†	60	1	31	0.79	- 2.30	0.40	0	3	9	20	1	sw.	E. L. Lucas.
Lake Cormorant.	De Soto.	206	2								0.26		0.10	0	3	29	1	0	sw.	Tallahatchie Drainage Com.
Lula.	Coahoma.	182	2								0.14		0.14	0	1	29	1	0	sw.	Do.
Marks.	Quitman.	163	2								0.06		0.06	0	1				ne.	F. L. Garrity.
Natchez.	Adams.	206	23	81.4	+ 4.0	96	12†	64	1	26	3.16	- 0.28	2.00	0	6	16	0	14	sw.	Tallahatchie Drainage Com.
New Albany.	Union.	398	2								0.76		0.38	0	3	22	8	0	s.	Dr. C. W. Bolton.
Pontotoc.	Pontotoc.	475	22	78.7	+ 5.0	95	14	57	23	31	1.44	- 1.63	0.74	0	4	16	4	3	nw.	H. H. Crisler.
Port Gibson.	Claiborne.	116	23	81.6	+ 5.8	99	14	64	1†	29	0.92	- 2.21	0.40	0	5	23	4	3	sw.	T. J. Murray.
Rosedale.	Bolivar.	143	3	80.6		97	12†	61	1†	30	0.56		0.45	0	3	21	4	5	sw.	Tallahatchie Drainage Com.
Senatobia.	Tate.	284	2								0.38		0.20	0	3	29	0	1	sw.	J. C. Pitchford.
Sho糸oe.	Madison.	8	80.7					59	1	33	1.32	- 2.04	1.09	0	3	22	8	0	se.	Prof. George H. Kent.
Suffolk.	Franklin.	10	81.5	+ 3.7	98	13	65	24	28	3.25	- 0.66	1.33	0	10	18	10	2	ne.	B. F. Saunders.	
Swan Lake.	Holmes.	148	6	81.7		98	14†	62	2	31	1.88		1.45	0	2	13	17	0	sw.	Dr. M. P. Winkler.
Tchula.	Hinds.	287	7	81.6		99	13†	65	1†	27	1.72		0.85	0	4	18	10	2	sw.	Dr. J. P. Dudley.
Utica.	Warren.	247	40	81.7	+ 6.9	95	12	69	24	21	2.47	- 0.87	2.16	0	6	10	17	3	sw.	U. S. Weather Bureau.
Vicksburg.	Yalobusha.	300	22	80.7	+ 6.0	99	14	58	1	33	1.55	- 1.88	1.15	0	3	28	2	0	ne.	Miss Loula Erikson.
Water Valley.	Wilkinson.	560	18	81.6	+ 4.4	96	14	66	24	26	3.22	- 0.31	1.00	0	5	15	15	0	se.	James E. Lee.
Woodville.	Yazoo.	116	17	81.4	+ 4.9	99	14	62	1	29	0.68	- 2.03	0.39	0	5	26	1	3	sw.	W. H. Courts.
<i>Louisiana.</i>																				
Abbeville.	Vermillion.	18	23	81.4	+ 3.2	95	12	69	24	23	4.18	- 0.10	1.02	0	15	7	12	11	sw.	C. J. Edwards.
Alexandria.	Rapides.	77	23	82.4	+ 5.1	97	12†	62	1	32	1.37	- 1.59	1.07	0	3	20	5	5	sw.	Nellie Graham.
Amite.	Tangipahoa.	130	23	81.5	+ 4.2	98	11	67	25	27	5.48	+ 0.71	1.25	0	7	7	23	0	n.	Lulu M. Wentz.
Avoca Island.	St. Mary.																		w.	J. N. Pharr & Sons (Ltd.).
Baton Rouge.	East Baton Rouge.	60	23	80.4	+ 2.6	97	13	65	6†	31	2.60	- 1.59	0.67	0	12	17	7	6	ne.	Elmo M. Bott.
Burnside.	Ascension.	20	11	81.9	+ 4.2	96	12	69	21†	23†	0.33	+ 0.96	1.16	0	13	3	15	12	sw.	C. S. McFarland.
Burrwood.	Plaquemines.	20	23	85.6	+ 5.3	94	6	75	27	18	3.73	- 3.03	1.72	0	7	19	9	2	se.	Graham Myers.
Cades.	St. Martin.	1	23	82.8		98	13	70	24	24	2.41		0.58	0	9	21	9	0	s.	C. E. Smedes.
Calhoun.	Ouachita.	180	23	82.0	+ 6.7	100	13	60	1	33	1.16	- 2.10	0.63	0	3	16	14	0	sw.	North Louisiana Exp. Sta.
Cameron.	Cameron.	6	18	81.8	+ 2.3	93	6†	69	1	20	1.65	- 3.67	0.36	0	6	6	19	5	se.	State Biological Station.
Carrollton.	Orleans.	7																	w.	Loyola College.
Cheneyville.	Rapides.	67	23	82.2	+ 5.3	99	12†	64	1	28	1.69	- 0.22	1.45	0	3	23	3	4	sw.	Walter I. Tanner.
Cinclare.	West Baton Rouge.	1		82.4		98	13	68	23	26	3.49		0.65	0	13	16	13	1	se.	Cinclare Central Factory.
Clinton.	East Feliciana.	113	23	80.6	+ 3.9	95	14	67	24	24	2.54	- 1.43	1.40	0	10	14	12	4	sw.	John A. White.
Collinston.	Morsehouse.	65	10	83.0	+ 6.2	100	12†	63	2	31	0.28		0.18	0	2	21	6	3	sw.	John B. Reilly.
Covington.	St. Tammany.	39	19	82.2	+ 4.4	97	12†	69	21†	26	3.51	- 0.99	1.20	0	13	22	5	3	sw.	Lucille Champagne.
Dodson.	Winn.	1	22	82.6		99	18	63	1	29	1.74		0.80	0	5	12	17	1	sw.	J. P. Lucas.
Donaldsonville.	Ascension.	33	23	83.2	+ 4.4	97	13†	70	21†	25	6.49	+ 1.05	1.40	0	10	15	15	0	se.	John F. Park.
Dutchtown.	do.										4.22		1.10	0	10				w.	Picard & Geismar (Ltd.).
Farmerville.	Union.	177	23	80.4	+ 4.8	95	60	1	28	0.25	- 2.54	0.25	0	1	25	4	1	sw.	W. P. Chandler.	
Ferriday.	Concordia.	4		81.5		96	12†	64	24	27	0.10		0.10	0	1	29	1	0	sw.	R. Z. Slater.
Franklin.	St. Mary.	10	19	82.8	+ 3.8	97	5†	71	18†	24	7.57	+ 1.81	1.07	0	18	18	9	3	sw.	J. M. Bonney.
Grand Cane.	De Soto.	302	17	78.5	+ 2.4	99	18	51	1	40	0.37	- 2.84	0.22	0	3	14	14	2	se.	G. Foster Provost.
Grand Coteau.	St. Landry.	93	23	82.2	+ 4.6	97	13	67	24	25	3.78	+ 0.31	0.58	0	12	19	11	0	s.	St. Charles College.
Hammond.	Tangipahoa.	44	19	81.6	+ 4.3	99	12	61	7	32	4.67	- 1.05	1.40	0	10	15	15	0	sw.	C. C. Carr.
Houma.	Terrebonne.	23	82.4	+ 4.1	98	13	69	3†	26	5.54	- 0.38	1.12	0	13	17	2	11	sw.	H. M. Foote.	
Jena.	Catahoula.	83	0	80.0		100	12†	66	1	31	1.87		1.87	0	1	28	0	0	sw.	I. A. Wilbanks.
Jennings.	Calcasieu.	30	14	83.0	+ 4.9	100	12	67	1											

TABLE 1.—*Climatological data for September, 1911. District No. 7—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.							Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Louisiana—Continued.</i>																				
St. Francisville.....	West Feliciana.....	115	8	81.9		95	14	66	4	24	4.00	1.27	0	4	19	10	1	s.	L. P. Kilbourne.	
Schriever.....	Terrebonne.....	17	19	82.6	+ 4.3	98	10	68	21	27	7.91	+ 2.84	1.81	0	17	27	1	e.	Harriet F. Riveire.	
Sheridan.....	Washington.....	1		81.9		99	14	67	1	30	5.55		1.50	0	13	3	27	0	D. A. Self.	
Shreveport.....	Caddo.....	249	40	82.5	+ 6.8	96	12	66	1	23	0.93	— 2.29	0.87	0	5	22	5	3	U. S. Weather Bureau.	
Simmesport.....	Avoyelles.....	42	5								0.64		0.34	0	6	10	8	12	C. T. Leigh.	
Southern University Farm.....	Jefferson.....		14								3.58	— 1.26	1.56	0	10	3	12	15	F. L. St. Martin.	
Sugartown.....	Calcasieu.....		18	82.2	+ 4.8	94	13†	67	24	21	3.71	+ 1.02	1.80	0	5	1	29	0	..... G. W. Richardson.
Tallulah.....	Madison.....	91	4	81.5		99	13	61	1	30‡	2.18		1.60	0	2	0	30	0	..... C. E. Speed.
Walker.....	Livingston.....		1	80.8		95	12	67	23	25	4.44		2.20	0	10	10	9	11	..... H. C. Fondren.

*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

†. Also on other dates.

‡. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for September, 1911. District No. 7, Lower Mississippi Valley.*

TABLE 2.—*Daily precipitation for September, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for September, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for September, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for September, 1911. District No. 7—Continued.*

* Precipitation included in that of the next measurement.

Separate dates of falls not recorded.

Precipitation for the 24 hours ending on the morning when it is measured.
Precipitation is less than 0.01 inch rain or melted snow.

I. Precipitation is less than 0.01 inch rain or melted snow

TABLE 3.—Maximum and minimum temperatures at selected stations for September, 1911. District No. 7, Lower Mississippi Valley.

Date.	Colorado.				New Mexico.				Texas.				Kansas.								Oklahoma.							
	Laram.		Leadville.		Pueblo.		Albert.		Cimarron.		Amarillo.		Paris. \$		Dodge City.		Ellinwood.		Iola.		Liberal.		Wichita.		Ardmore. \$		Bartlesville.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	101	55	63	37	92	57	91	61	83	49	90	62	90	60	95	63	99	63	92	56	93	68	92	65	94	60		
2....	94	57	62	35	83	55	95	53	81	52	91	61	94	57	99	61	93	62	95	57	93	64	96	64	95	60		
3....	94	55	58	33	70	53	90	50	75	47	83	61	95	68	90	63	95	54	90	57	91	67	95	67	95	64		
4....	90	55	63	35	86	50	92	58	79	45	92	56	89	71	86	60	90	61	78	58	93	68	86	70	79	67		
5....	97	51	66	34	91	50	91	61	81	45	95	63	96	70	94	62	98	64	93	55	91	67	96	70	96	66		
6....	90	64	57	32	84	55	93	59	77	44	93	67	97	71	95	70	100	71	96	69	94	64	97	65	96	72		
7....	86	63	62	29	71	56	80	60	79	50	79	62	98	73	74	57	90	57	81	57	73	63	95	74	77	64		
8....	82	66	69	31	79	56	87	59	75	41	84	62	89	73	78	64	85	68	86	60	82	66	85	58	88	64		
9....	96	63	62	37	89	58	89	64	75	50	81	64	96	70	81	65	81	62	83	67	88	60	79	69	91	69		
10....	100	69	68	38	91	59	93	56	82	45	83	67	98	71	93	68	96	71	88	71	99	61	92	73	93	71		
11....	100	62	72	38	93	58	97	61	86	48	92	64	100	71	99	66	101	66	93	68	100	60	97	74	96	70		
12....	100	63	72	40	94	56	91	61	85	52	92	64	104	73	97	69	102	63	95	72	100	61	97	73	99	101		
13....	101	67	66	42	90	58	90	63	82	50	92	67	101	74	100	72	105	72	96	73	101	67	97	74	97	100		
14....	99	65	53	41	78	61	92	64	77	56	92	66	99	73	96	73	102	76	95	75	100	68	97	75	93	98		
15....	88	63	59	32	80	58	86	62	78	54	92	64	99	73	81	63	84	69	94	69	83	61	87	69	95	74		
16....	98	60	65	32	88	54	92	63	80	49	93	64	99	75	87	64	90	60	83	69	92	62	82	70	97	72		
17....	98	60	63	39	90	59	95	59	83	47	94	68	99	75	98	70	102	72	92	71	99	64	95	73	95	70		
18....	78	51	60	31	68	43	96	56	70	41	73	57	101	70	75	55	84	56	75	56	84	54	81	57	98	76		
19....	88	57	60	38	66	48	91	60	70	44	69	54	98	76	75	46	80	40	73	50	73	43	72	51	78	61		
20....	85	42	54	28	78	48	87	49	77	45	84	57	98	68	85	56	79	55	57	87	55	70	58	92	65	75		
21....	92	55	65	29	87	41	98	57	80	42	86	57	84	68	82	54	82	48	75	51	87	55	76	51	90	68		
22....	96	58	68	35	87	48	90	53	80	40	85	60	83	70	87	60	89	55	82	51	91	57	82	56	88	48		
23....	92	59	60	36	89	54	86	57	80	47	93	62	92	66	89	64	93	67	85	61	97	62	90	67	93	66		
24....	76	53	61	35	78	51	94	52	81	47	90	65	93	67	80	52	82	53	89	66	88	50	82	63	95	68		
25....	80	58	64	36	78	47	90	59	82	42	91	66	96	69	81	56	76	55	87	62	95	56	84	61	95	67		
26....	90	58	59	39	84	56	90	59	80	54	86	63	96	69	91	56	94	56	88	62	93	58	88	61	95	69		
27....	92	60	62	33	84	51	91	60	82	49	90	65	93	70	94	69	99	70	91	69	96	55	94	71	97	68		
28....	94	67	66	39	84	55	90	61	80	48	90	65	96	70	98	72	104	74	92	71	98	68	95	72	97	69		
29....	65	59	55	40	65	52	82	59	72	54	89	65	97	71	75	55	85	68	78	62	91	63	81	52	91	71		
30....	78	52	57	38	82	51	87	52	72	55	82	66	93	71	84	56	88	66	83	59	83	55	81	80	75	61		
Mns.	90.7	58.9	61.7	35.0	82.9	53.6	90.5	58.7	78.8	47.8	87.7	62.8	95.6	70.4	87.9	61.9	91.5	61.3	86.4	64.6	91.8	58.5	86.6	65.6	93.3	69.6		

Date.	Oklahoma.										Missouri.										Lynnville, Ky.		Jackson, Tenn.				
	Enid. \$		McAlester.		Mangum. \$		Muskogee.		Oklahoma.		Weatherford. \$		Woodward.		Caruthersville.		Ironton. \$		Lamar. \$		Olden.		Springfield.				
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1....	95	61	90	62	99	64	88	62	91	66	95	64	91	60	88	58	90	50	89	61	85	60	84	63	-----	91	59
2....	97	58	95	65	97	63	91	63	95	65	99	59	92	62	91	61	95	55	90	63	86	65	92	64	-----	93	62
3....	99	60	91	68	93	68	90	69	93	70	95	62	91	62	90	68	95	61	93	60	86	68	94	65	-----	94	65
4....	90	64	90	64	105	68	81	69	86	69	88	63	88	60	91	68	84	59	73	70	84	67	74	68	-----	90	68
5....	99	68	95	72	101	70	91	72	95	70	102	68	94	62	87	70	88	61	87	68	86	77	86	69	-----	90	68
6....	101	70	96	74	93	71	93	73	96	73	99	69	98	74	97	74	98	68	92	72	89	70	96	70	95	71	99
7....	89	67	94	75	84	67	86	69	87	70	96	72	98	73	98	71	98	69	82	70	83	70	96	70	94	71	99
8....	90	67	83	68	93	68	84	67	85	69	81	66	83	65	86	65	83	66	84	68	76	70	86	70	94	70	99
9....	98	68	94	70	97	70	88	68	90	72	91	68	86	67	89	70	84	66	82	68	84	66	84	66	94	70	99
10....	98	70	95	73	101	70	91	70	93	72	94	69	95	73	91	69	88	68	88	67	84	67	84	67	93	69	99
11....	102	69	97	73	102	70	94	70	96	73	99	71	99	68	91	71	88	65	92	69	88	68	88	69	95	72	99
12....	103	68	100	74	103	71	97	74	96	74	100	71	100	74	95	70	98	68	97	71	94	69	92</td				

TABLE 3.—*Maximum and minimum temperatures at selected stations for September, 1911. District No. 7—Continued.*

Date.	Tennessee.				Arkansas.												Mississippi.												
	Kenton.		Memphis.		Bentonville.		Corning.		Dardanelle.		El Dorado.		Fort Smith.		Little Rock.		Pine Bluff.		Texarkana.		Wynne.		Clarkdale.		Corinth.		Greenville.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1.....	88	59	84	68	85	58	88	55	86	56	89	61	88	64	85	64	86	62	87	60	87	62	88	60	89	63	89	63	
2.....	88	65	84	70	88	59	85	61	89	59	87	64	90	66	84	69	85	62	88	70	81	64	89	66	92	63	91	65	
3.....	92	69	88	73	87	63	89	64	91	62	89	67	99	71	88	70	90	67	88	70	87	65	91	69	93	68	90	70	
4.....	91	68	88	74	73	70	88	68	85	71	88	71	83	71	85	70	90	72	87	67	88	70	88	68	89	68	90	71	
5.....	88	70	87	75	89	69	88	63	92	71	92	73	93	71	89	73	92	73	93	72	90	70	92	71	90	70	92	71	
6.....	82	67	91	76	91	71	92	68	94	72	93	72	94	74	91	74	95	74	93	75	95	73	93	73	94	66	94	73	
7.....	91	71	91	75	78	67	87	69	93	70	93	71	93	73	92	72	94	73	92	73	95	73	93	73	94	73	94	73	
8.....	92	70	92	75	78	67	86	69	84	69	94	70	78	70	90	73	91	72	93	73	91	71	96	71	95	70	95	73	
9.....	93	69	87	72	87	65	85	70	91	68	94	71	90	69	90	71	92	72	94	72	90	70	93	71	95	70	93	71	
10....	92	68	89	73	89	68	91	69	93	69	94	73	92	71	91	73	94	72	93	73	93	71	91	72	94	69	93	73	
11....	90	69	90	76	91	69	89	72	94	71	95	73	92	73	95	73	95	73	98	74	95	73	94	71	94	74	94	74	
12....	96	70	93	77	95	71	96	72	98	71	98	73	97	74	96	74	95	74	97	73	96	73	96	70	96	75	96	75	
13....	96	68	94	78	94	71	97	69	98	70	97	72	98	74	94	75	96	74	96	75	95	73	97	72	95	73	95	73	
14....	95	72	92	78	90	73	93	75	95	71	94	74	94	75	93	76	96	76	96	76	96	73	96	72	96	74	96	74	
15....	94	72	90	76	91	71	93	75	95	72	94	73	95	76	91	76	94	75	95	70	90	75	93	73	92	72	92	73	
16....	93	72	90	77	89	71	92	73	96	74	94	74	94	74	92	74	94	75	96	76	94	75	94	71	94	75	95	75	
17....	96	71	91	75	92	70	94	72	95	73	94	73	94	74	92	74	94	74	95	75	95	74	96	71	94	74	94	74	
18....	97	72	92	74	91	64	96	77	95	71	95	73	95	71	92	70	95	73	96	75	95	71	97	72	94	74	94	74	
19....	84	66	80	65	69	58	77	66	80	69	90	70	75	65	80	67	84	70	93	73	80	70	86	69	84	68	90	72	
20....	84	60	81	64	80	58	79	58	82	64	91	70	84	66	84	63	86	65	91	70	81	66	88	63	89	63	91	67	
21....	84	81	64	77	55	.....	.....	.....	86	64	88	70	85	67	81	64	80	65	89	71	79	64	83	66	88	66	85	68
22....	52	78	58	80	53	79	57	87	69	80	61	78	59	84	63	83	69	78	56	83	59	84	57	87	67	87	67
23....	53	83	61	85	59	87	58	82	63	87	63	85	63	88	62	87	68	89	54	91	59	88	57	92	64	92	64
24....	59	89	68	88	65	92	60	93	64	91	69	89	69	93	66	92	69	92	57	92	62	92	65	92	66	92	67
25....	94	65	89	71	89	67	93	67	93	66	92	70	89	71	92	67	92	69	92	65	93	71	92	66	92	67	92	67
26....	93	67	89	72	89	65	90	66	95	67	90	70	89	71	94	68	92	71	92	66	93	66	94	66	94	66	94	69
27....	98	62	92	72	89	67	93	68	96	69	93	71	92	72	96	69	93	71	90	66	97	68	93	66	94	70	93	70
28....	96	67	90	75	88	68	94	69	94	69	93	73	91	75	95	70	94	73	88	68	94	69	94	70	93	70	93	70
29....	95	70	90	75	88	67	95	69	92	70	95	72	90	73	91	73	93	73	89	71	93	71	94	70	93	72	93	72
30....	76	61	83	68	82	66	84	65	94	72	79	71	80	65	90	70	94	72	88	65	90	71	92	68	92	72	92	72
Mns..	90.8	66.4	87.9	71.8	86.1	65.5	89.2	68.5	90.6	67.2	92.3	70.0	89.8	70.3	88.5	70.4	91.6	69.9	92.3	72.0	89.7	68.1	92.0	68.8	92.1	67.4	92.3	70.5	

Date.	Mississippi.								Louisiana.												Shreveport.																		
	Kosciusko.				Natchez.				Vicksburg.				Alexandria.			Baton Rouge.			Covington.			Lafayette.			Lake Charles.			Monroe.			New Orleans.			Robeline.			Schriever.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.					
1.....	89	60	90	64	88	70	94	62	92	66	92	71	94	63	90	64	93	64	90	64	93	67	94	74	92	64	93	70	96	68	93	74							
2.....	92	62	90	71	88	70	90	71	91	67	91	72	94	73	90	69	94	67	94	68	94	74	92	64	93	70	96	68	93	72	94	72							
3.....	88	65	87	70	87	70	90	71	90	66	90	71	90	70	88	69	91	68	93	69	93	72	93	69	93	68	93	72	93	68	93	72							
4.....	86	67	90	69	88	70	90	72	91	66	91	71	90	71	89	69	90	71	90	72	93	75	98	69	93	71	90	72	94	74									
5.....	92	69	91	72	88	74	93	72	90	66	93	73	91	74	95	70	93	72	90	73	90	72	96	71	91	71	93	74	93	74									
6.....	95	70	94	73	89	74	94	72	95	65	91	71	95	73	92	67	95	74	96	75	98	73	95	71	92	74	94	74	95	74									
7.....	96	70	94	70	97	73	95	73	92	66	94	71	91	72	94	71	96	73	97	74	96	75	98	70	94	70	96	74	94	74									
8.....	95	71	91	70	92	74	95	71	94	66	95	73	92	72	96	78	98																						